## **CLAIMS**

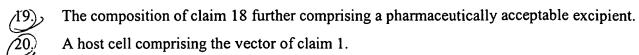
## What is claimed is:

- 1. An adenovirus vector comprising an intron and a heterologous transgene wherein said intron is located 5' to the heterologous transgene, and wherein said vector is capable of expressing greater levels of the heterologous transgene than a comparable adenovirus vector comprising a heterologous transgene and lacking an intron 5' to said heterologous transgene.
- The adenovirus vector of claim 1, wherein said vector is mammalian or avian.
- 3.) The adenovirus vector of claim 2, wherein mammalian includes human, non-human primate, bovine, porcine, canine, or ovine.
- The adenovirus vector of claim 2, wherein said vector is bovine adenovirus vector.
- The adenovirus vector of claim 4, wherein said bovine adenovirus vector is a member of subgroup 1 bovine adenovirus or subgroup 2 bovine adenovirus.
- 6. The adenovirus vector of claim 4, wherein said bovine adenovirus vector is BAV3.

  The adenovirus vector of claim 1, wherein said transgene encodes a eucaryotic or

procaryotic protein.

- 8. The adenovirus vector of claim 7 wherein said transgene encodes a therapeutic protein or polypeptide; a growth hormone or other growth enhancer; or a protein capable of eliciting an immune response.
- The adenovirus vector of claim 7, wherein said transgene encodes a protein from a pathogen.
- 10. The adenovirus vector of claim 9, wherein said protein is an RNA viral protein.
- (11.) The adenovirus vector of claim 9 wherein said protein is a DNA viral protein.
- 12. The adenovirus vector of claim 9, wherein said protein is a bacterial protein.
- 13. The adenovirus vector of claim 9, wherein said protein is a protein from a parasite.
- 14) The adenovirus vector of claim 1, wherein said intron is a mammalian intron.
- The adenovirus vector of claim 1, wherein said transgene is operably linked to a control region and said intron is located 3' to said control region.
- The adenovirus vector of claim 1, wherein said vector is replication-competent.
- (17) The adenovirus vector of claim 1, wherein said vector is replication-defective.
- (18) A composition comprising a vector according to claim 1.



- A recombinant adenovirus comprising the vector of claim 1.
- 22. A method of preparing an adenovirus vector comprising an intron and a heterologous transgene wherein said intron is located 5' to said heterologous transgene, said method comprising the steps of obtaining an adenovirus vector and inserting a transgene and an intron into said vector, wherein said intron is inserted 5' to said heterologous transgene.
- 23. The method of claim 22 wherein said adenovirus vector has a deletion in a gene essential for replication.
- 24. The method of claim 23 wherein said gene essential for replication is E1.
- 25. A method of preparing an adenovirus comprising the adenovirus vector of claim 1, comprising the steps of culturing a mammalian host cell comprising the adenovirus vector of claim 1 under conditions suitable for adenovirus replication and packaging; and optionally recovering said adenovirus produced.
- 26. The method according to claim 25 wherein said adenovirus has a deletion in a gene essential for replication and said method further comprises the step of culturing said mammalian host cell in the presence of a helper cell line which comprises said gene essential for replication.
- 27. The method of claim 26 wherein said gene essential for replication is E1.
- 28. An immunogenic composition comprising an adenovirus vector of claim 9.
- An immunogenic composition comprising an adenovirus vector of claim 10.
- An immunogenic composition comprising an adenovirus vector of claim 11.
  - 31. An immunogenic composition comprising an adenovirus vector of claim 12.
  - 32. An immunogenic composition comprising an adenovirus vector of claim 13.

- 33. A composition capable of inducing an immune response in a mammalian subject, said composition comprising the immunogenic composition of claim 28.
- 34. The composition according to claim 33 further comprising a pharmaceutically acceptable excipient.
- 35. A method of treating or ameliorating the symptoms of a RNA viral infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 29.
- 36. A method of treating or ameliorating the symptoms of a DNA viral infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 30.
- 37. A method of treating or ameliorating the symptoms of a bacterial infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 31.
- 38. A method of treating or ameliorating the symptoms of a parasitic infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 32.